

PENNSYLVANIA RAILROAD, SELINGROVE BRIDGE
Pennsylvania Historic Railroad Bridges Recording Project
Spanning Susquehanna River, south of Cherry Island
Selingsgrove
Snyder County
Pennsylvania

HAER No. PA-554

HAER
PA
55-SEL,
2-

PHOTOGRAPHS

XEROGRAPHIC COPIES OF COLOR TRANSPARENCIES

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
1849 C Street, NW
Washington, DC 20240

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Location: Spanning Susquehanna River, south of Cherry Island, between Selinsgrove, Snyder County, and Selinsgrove Junction, Northumberland County, Pennsylvania.

USGS Quadrangle: Sunbury, Pennsylvania (7.5-minute series).

UTM Coordinates: 18/344680/4518090 (east channel spans)
18/344190/4518130 (west channel spans)

Dates of Construction: 1888-92.

Basis for Dating: Secondary sources; plaque on bridge.

Dates of Alteration: 1901, 1925, 1930.

Designer: William H. Brown (Chief Engineer, Pennsylvania Railroad).

Fabricators / Builders: A. & P. Roberts, agents for Pencoyd Bridge & Construction Co. (Pencoyd, Pa.), east channel spans; Cofrode & Saylor, Engineers & Bridge Builders (Pottstown, Pa.), west channel spans.

Present Owner: Norfolk Southern Railroad.

Present Use: Railroad bridge.

Significance: The Selinsgrove Bridge is significant for its surviving lightweight wrought-iron Pratt trusses of two different designs. Over the west channel, twelve spans have unusual subdivided end panels; over the east, four spans have a 12'-6" skew.

Structure Type: Wrought-iron, pin-connected Pratt through truss.

Historian: Justin M. Spivey, April 2000.

Project Information: The Historic American Engineering Record (HAER) conducted the Pennsylvania Historic Railroad Bridges Recording Project during 1999 and 2000, under the direction of Eric N. DeLony, Chief. The project was supported by the Consolidated Rail Corporation

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(Conrail) and a grant from the Pennsylvania Historical and Museum Commission (PHMC). Justin M. Spivey, HAER engineer, researched and wrote the final reports. Preston M. Thayer, historian, Fredericksburg, Virginia, conducted preliminary research under contract. Jet Lowe, HAER photographer, and Joseph E. B. Elliott, contract photographer, Sellersville, Pennsylvania, produced large-format photographs.

Description and History

Two months before its December 1871 opening, the Sunbury & Lewistown Railroad was leased to the Pennsylvania Railroad (PRR). PRR consolidated it into another subsidiary, the Schuylkill & Juniata Railroad, in June 1900, before absorbing it entirely in April 1902.¹ This single-track structure takes advantage of Cherry Island to reduce the length of bridge required to cross the river, with four spans on the east side, an embankment roughly 500'-0" long across the island, and twelve spans on the west. Portions of the bridge have been replaced at various dates, starting in 1877 when a fire destroyed eight of the west channel spans. The present east and west channel spans are essentially two different bridges, having been built at different times by different contractors.

The present east channel piers date to 1888, although it is not clear whether the original wooden spans were also replaced at that time.² An 1892 contract with A. & P. Roberts, agents for Pencoyd Bridge & Construction Company, stipulates the removal of "four Howe trusses," but does not indicate the material of those spans.³ The contractors installed four wrought iron, pin-connected Pratt through trusses, each 173'-0" long, with a 12'-6" skew. The trusses are 28'-0" deep and placed 16'-0" on center. The portals have a distinctive Greek Revival pediment. While most panels are 21'-7-1/2" long, the skew is accomplished with a 16'-4-1/2" end panel opposite a 27'-10-1/2" half-hip end panel at either end.⁴ At some point, perhaps in 1930, PRR crews performed a major overhaul of the east channel spans. This consisted of installing clamps to distribute loads among parallel groups of eye-bar members, along with strengthening of stringers and floor beams.⁵

Over the west channel, the trusses are not skewed and have a different design. The first two spans from the east are 175'-0" long; the remainder are ten 172'-0" spans. After a portion of the wooden bridge burned in 1877, the Keystone Bridge Company constructed "eight spans [of] Howe truss bridge with an arch," presumably of iron.⁶ All twelve spans were replaced during 1888 and 1889, under three separate contracts with Joseph H. Cofrode & Francis H. Saylor of Philadelphia, who fabricated the spans at their Pottstown plant. Evidently the new spans were urgently needed, because the last contract promised \$100 per day for early completion, with an equal penalty for delays.⁷ All twelve spans have a modified Pratt pattern with unusual subdivided end panels, in which an extra diagonal delivers part of the first floor beam's load to the midpoint of the end post. The trusses are 32'-0" deep and also placed 16'-0" on center.⁸ PRR

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crews encased three piers' foundations in concrete in 1925.⁹ When the east channel spans were overhauled, similar clamps were installed on the west channel spans' lower chords and counters.

Notes

1. Howard W. Schotter, *The Growth and Development of the Pennsylvania Railroad Company: A Review of the Charter and Annual Reports of the Pennsylvania Railroad Company 1846 to 1926* (Philadelphia: Press of Allen, Lane, and Scott, 1927), 98, 264.
2. Coverdale & Colpitts, Consulting Engineers, *The Pennsylvania Railroad Company, Description of Important Bridges and Stations* (New York, 1945), 18. Located in file: PRR Office of Secretary, Studies by Consultants and Published Reference Materials, 1855-1958, Box 1, Penn Central Railroad Records, Manuscript Group 286, Pennsylvania State Archives, Harrisburg, Pa.
3. Agreement No. 1728, "A. & P. Roberts Co., with the Penna. R. R. Co. for Selinsgrove Bridge Four Spans over Eastern Channel Susquehanna River, Dated Dec. 29, 1891," located in file: Bridges - Lewistown Division 1888-1891, Box 746, Construction Contracts, Engineering Department, Pennsylvania Railroad Company records, Acc. 1807, Hagley Museum and Library, Greenville, Del. [hereinafter cited as PRR Construction Contracts]. A. & P. Roberts had bid \$0.0365 per pound.
4. Pencoyd Bridge & Construction Co., "Bridge No. 23 over East Channel, Susquehanna Riv. At Selinsgrove, Lewistown Div., P. R. R.," dated 16 Feb. 1892, milepost 44.40, region/division/branch 131346, aperture card files, Consolidated Rail Corp., Philadelphia, Pa. [transferred to Norfolk Southern Railway Co., Atlanta, Ga.; hereinafter cited as Conrail aperture cards].
5. Pennsylvania Railroad, "Wilkes-Barre Div., Lewistown Bch., U. G. Bridges Nos. 44.04 & 44.40 over Susquehanna River," 30 Aug. [year illegible], milepost 44.04, region/division/branch 131346, Conrail aperture cards. Coverdale & Colpitts, *Important Bridges*, 18, mentioned a rebuilding of the east channel spans in 1930, which might be this overhaul.
6. Agreement No. 53, "The Keystone Bridge Co. with Pennsylvania Railroad Co. for Rebuilding Selinsgrove Bridge, March 8th, 1877," located in file: Selinsgrove, Pa. 1877, Box 755, PRR Construction Contracts. The contract refers to a 1407'-0" section costing \$33,500.
7. Agreement No. 1168, "Cofrode & Saylor, with the Penna. R. R. Co. for Furnishing and Erecting 4 Spans Susq. Bge. #28 at Selinsgrove on the Lewistown Div., Nov. 30, 1888"; Agreement No. 1144, "... Dated Sept. 25, 1888"; and Agreement No. 1282, "... Dated Aug. 12, 1889"; located in file: Bridges - Lewistown Division 1888-1891, Box 746, PRR Construction Contracts. Cofrode and Saylor bid \$0.0425 per pound, plus \$350 per span for a temporary trestle.
8. Cofrode & Saylor, Engineers & Bridge Builders, "Contract 544, Spans 10 & 11 of Selinsgrove Bridge, P. R. R.," dated 23 Apr. 1899, milepost 44.04, region/division/branch 131346, Conrail aperture cards.
9. Coverdale & Colpitts, *Important Bridges*, 18. While this report refers to a 1901 rebuilding, the present spans appear to be those constructed in 1888-89.

Acknowledgment

The author is grateful to the Northumberland County Historical Society for responding to a preliminary survey form.

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Additional Source

1. Photographs of this bridge, numbered 94.288.64-D and 98.24.63-C, are located at Northumberland County Historical Society, Sunbury, Pa.